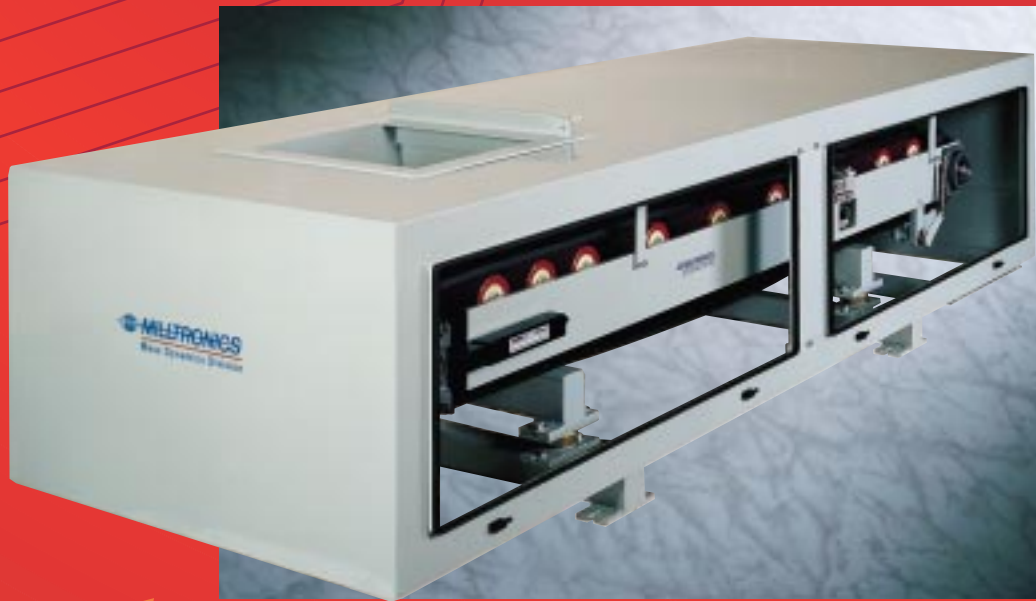




Autoweigh Feeder Series 800

A New Generation of Weigh Feeders



 **MILLTRONICS**
Mass Dynamics Division



Weigh Feeding for Medium to High Capacity Applications



Industrial Duty

The Milltronics 800 Series is a range of medium to high capacity weigh feeders used to accurately and reliably measure and control material feed rates.

Once installed, users get solid performance for industrial applications, including the rugged operating environments of mining, cement, chemical, pulp and paper and other process industries.



Field tested and proven in hundreds of applications, the 800 Series weigh feeder improves blend consistencies, reduces downtime, improves accountability and record keeping, blends continuously, eliminates inaccuracies and inefficiencies, improves profitability and automates production processes.

Weighing accuracies of $\pm 0.5\%$ can be expected.

- Medium-High Capacity
- Easy Belt Removal
- Flexible Sizes
- Rugged and Durable
- Open or Enclosed Construction

Easy to Maintain

The completely self-contained section includes a cantilevered mild steel structural inner frame for quick and easy belt removal. Its overall design eliminates areas of material build-up that can cause product contamination and weighing inaccuracies.

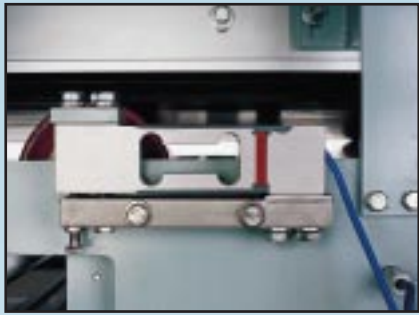
Dual externally mounted load cells allow for easy access and serviceability. Pre-set, factory adjusted, mechanical overload stops prevent load cell damage from incidental overload.

Other features include; telescoping screw take-ups, direct coupled shaft drive, 100mm (4") CEMA C heavy duty idlers, full length steel mechanical skirts, pillow block bearings, single idler weighbridge, strain gauges with overload protection and much more.

Unique Weigh Bridge Design

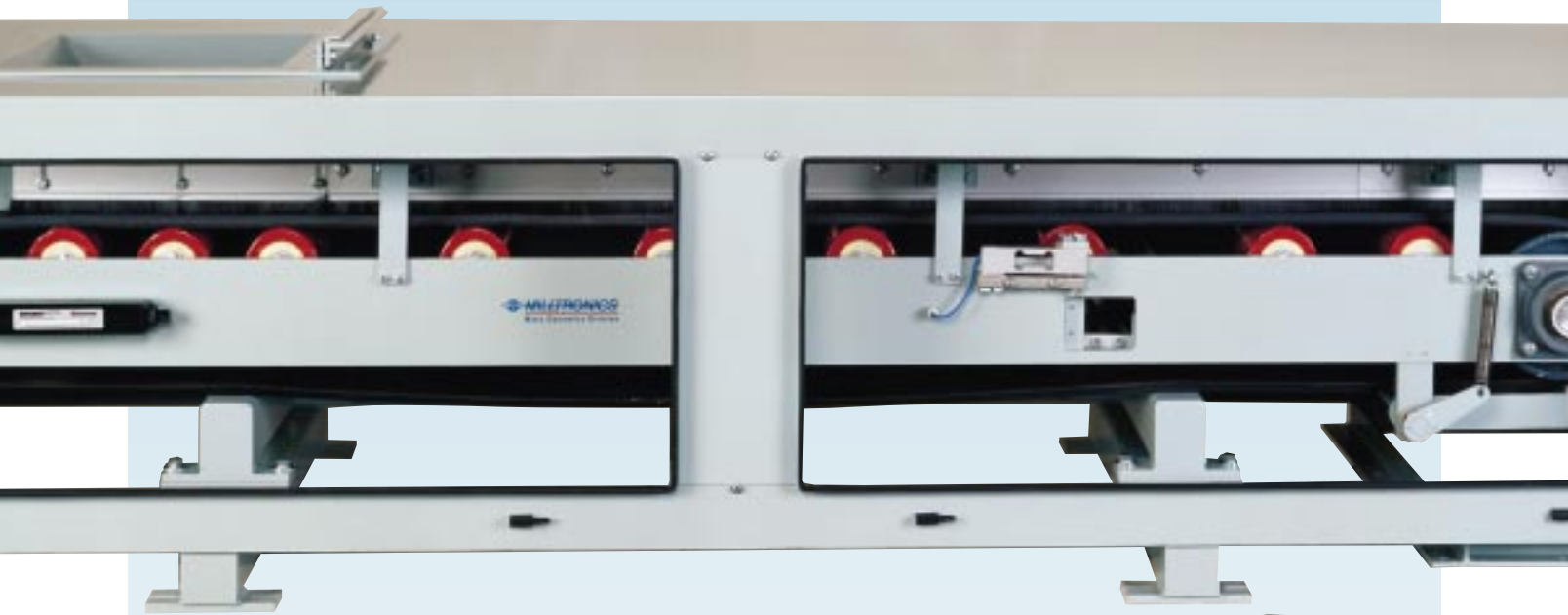
The 800 Series weigh feeder suspends a single weigh idler on platform load cells. Its design eliminates all moving parts and subsequent maintenance and replacement problems. There are no links or flexures.

Two corrosion resistant precision strain gauge load cells provide weight sensing signals to any of Milltronics' integrators.



Design features minimize zero drift and allow for the use of very sensitive, precision load cells with very little "dead load".

This maximizes resolution and weighing accuracy and provides for the use of a sturdy, rugged rigid frame which further ensures stability and repeatability.

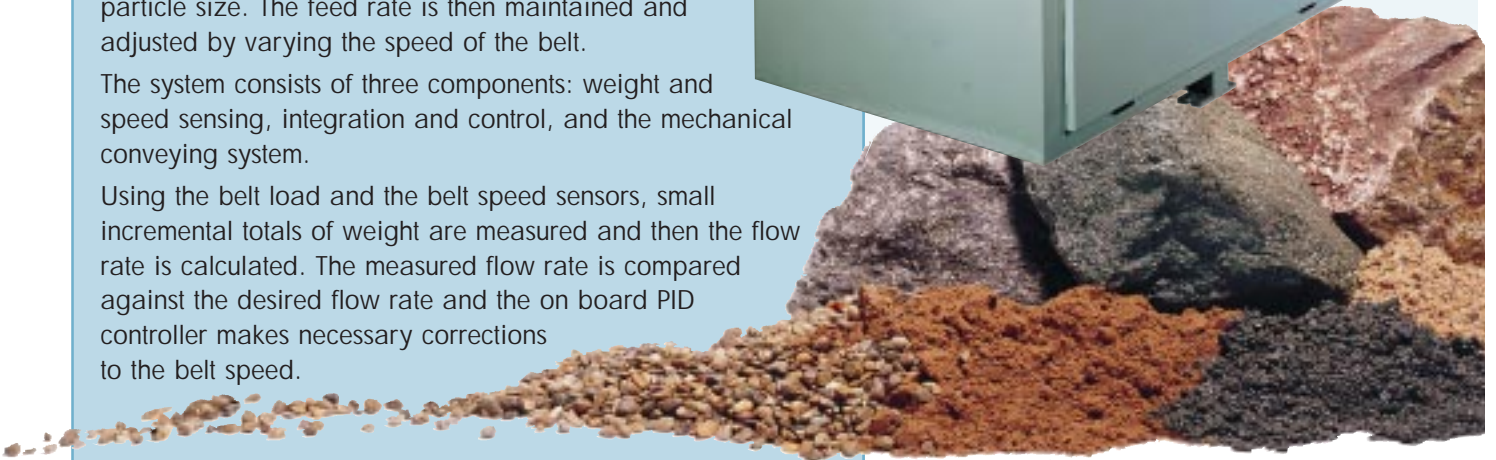


How It Works

The weigh feeder is used to deliver an accurate mass flow rate of material. The material is profiled by an adjustable mechanical shear gate which fixes the correct material bed depth for a given material particle size. The feed rate is then maintained and adjusted by varying the speed of the belt.

The system consists of three components: weight and speed sensing, integration and control, and the mechanical conveying system.

Using the belt load and the belt speed sensors, small incremental totals of weight are measured and then the flow rate is calculated. The measured flow rate is compared against the desired flow rate and the on board PID controller makes necessary corrections to the belt speed.



Flexibility

The 800 Series weigh feeder is available in a variety of belt sizes, belt widths, inlet configurations and materials of construction.

Belt widths from under 0.5m (18") to over 1m (42") and lengths from over 1.5m (62") make it the logical choice for medium to heavy duty applications.

The standard 800 Series uses a flanged flat feeder belt and full length mechanical skirts for material containment. For applications where it is necessary to reduce spillage of small particle size products, an optional flanged wall belt is available. A mass flow infeed with vertical shear gate is used to control product flow and profile of material across the belt. A special "horseshoe" shaped transition inlet is available for connection to bin outlets that experience flow problems.

There is a choice of open or enclosed construction to meet your exact requirements. Contact surfaces are painted steel (standard) or stainless steel (optional).



Minimal Downtime

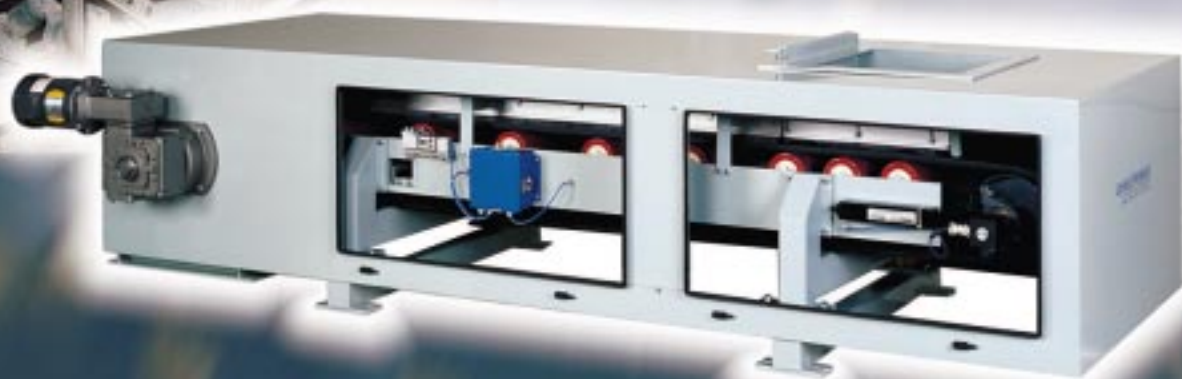
Heavy duty 102mm (4") idlers, with precision ground ball bearings, triple labyrinth seals and sealed lubrication provide more up-time than other units.



The large diameter 203mm (8") head and tail pulleys allow sufficient surface area to maximize friction at low belt tensions, providing optimum weighing linearity.

A spring tensioned belt cleaner effectively cleans the return side of the belt to minimize clean-up, reduce maintenance and provide more operating time.



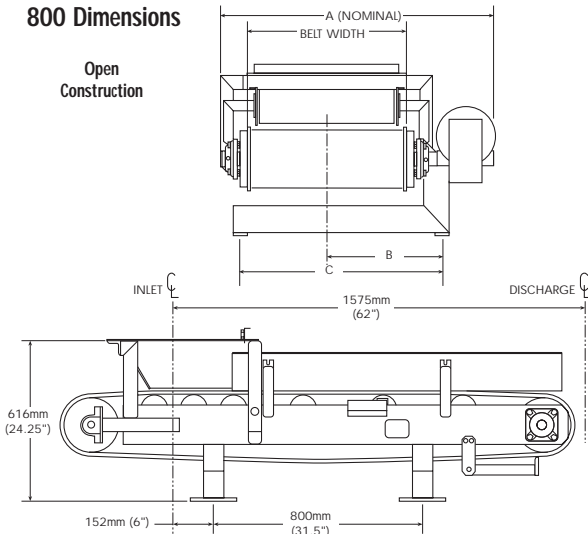


Specifications

Accuracy	±0.5%
Operating Temperature	-10°C to 40°C (14°F to 104°F)
Materials	Mild steel with stainless steel contact parts optional.
Load Cells	Two corrosion resistant platform type with mechanical overload protection.
Output	Non-linearity ±0.03% Non-repeatability 0.02%
Speed Sensor	Industrial duty, digital optical encoder, tail shaft mounted.
Framework	Precision machined with cantilevered mild steel structural frame for quick and easy belt removal.
Pulleys	200mm (8") crowned with 6mm (1/4") rubber lagging on drive pulley for maximum traction.

Belt Tension	Screw type, telescoper module with 150mm (6") travel.
Idlers	Heavy duty 100mm (4") CEMA C with ball bearings and triple labyrinth seals.
Belting	Black nitrile rubber, 135 PIW 3-ply vulcanised endless with "B" section (standard). 50mm (2") corrugated sidewalls, optional.
Drive	0.5 HP, TEFC, 208/230/460/575 Vac, three phase or 90/180 Vdc permanent magnet. Both with shaft mounted gear reducer. Larger/other motor sizes and voltages available.
Belt Cleaning	Spring tensioned UHMW blade at head pulley. Return plow at tail pulley (optional).

800 Dimensions



Open Unit

Belt Width	A	B	C
457mm (18)	889mm (35.00)	368mm (14.50)	622mm (24.50)
610mm (24)	1041mm (41.00)	445mm (17.50)	775mm (30.50)
762mm (30)	1194mm (47.00)	521mm (20.50)	927mm (36.50)
914mm (36)	1346mm (53.00)	597mm (23.50)	1080mm (42.50)
1067mm (42)	1499mm (59.00)	673mm (26.50)	1232mm (48.50)

Dimensions in mm (inches).

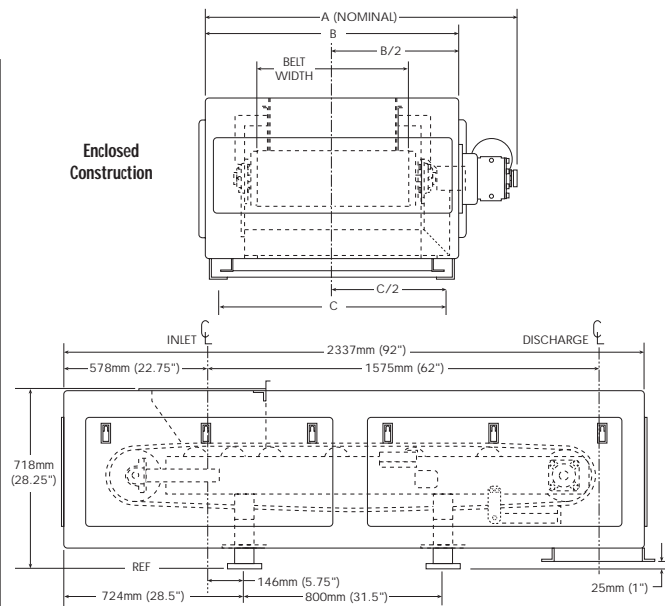
Shipping weight 410 kg (900 lbs.) to 820 kg (1800 lbs.) maximum.

*Standard components include belt weigh bridge, speed sensor, test weights, integrator and packaging.

Our continuous program to improve our products may result in changes to design and specification without notice.

Mass Dynamics is dedicated to the sales and development of continuous weighing, feeding and motion sensing instrumentation. Launched in 1997 as a new business division of Milltronics Ltd., Mass Dynamics offers a range of belt scales, solids flowmeters, weigh feeders, acoustic sensors and motion sensing equipment. Designed to withstand the sustained rigours of heavy primary industries, these products have proven their reliability in a wide range of harsh applications including the mining, mineral processing and cement industries. They are also used extensively in wet and dry food processing and petrochemicals.

Enclosed Construction



Enclosed Unit

Belt Width	A	B	C
457mm (18)	1100mm (43.31)	870mm (34.25)	762mm (30.00)
610mm (24)	1253mm (49.31)	1022mm (40.25)	914mm (36.00)
762mm (30)	1405mm (55.31)	1175mm (46.25)	1067mm (42.00)
914mm (36)	1557mm (61.31)	1327mm (52.25)	1219mm (48.00)
1067mm (42)	1710mm (67.31)	1480mm (58.25)	1372mm (54.00)

Representative

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